

What is claimed is:

1. An electronic commerce transaction audit system comprising:

a plurality of electronic notarize means, connected to each other via a network, for uniformly stamping time on all exchange messages between electronic commerce transaction entities to record and store said stamped time, and said electronic notarize means vie with each other to take a mutual notarization of said all exchange messages recorded and stored.

2. The electronic commerce transaction audit system according to claim 1, further comprising:

transaction log collect means for automatically collecting all exchange messages notarized and recorded by said plurality of electronic notarize means and for verifying 5 reliability of said all collected exchange messages, whereby determining an event occurred in the entire network area.

3. The electronic commerce transaction audit system according to claim 2, further comprising:

log analyze means for comparing the event occurred in the entire network area and verified and determined by said transaction log collect means with an event grasped in 5 advance and to be generated in the entire network area, whereby auditing conformity with specifications on the electronic commerce transaction between the respective electronic commerce transaction entities.

4. The electronic commerce transaction audit system according to claim 2, further comprising:

log analyze means for obtaining time that elapses before a response message is returned after receiving a request message in connection with the event occurred in the 5 entire network area and verified and determined by said transaction log collect means, whereby auditing a respond reaction ability of each electronic commerce transaction entity.

5. The electronic commerce transaction audit system according to claim 2,

further comprising:

log analyze means for calculating a frequency of occurrence of an abnormal response in connection with the event occurred in the entire network area and verified and
5 determined by said transaction log collect means, whereby auditing an abnormal response processing ratio of each electronic commerce transaction entity.

6. The electronic commerce transaction audit system according to claim 3,
further comprising:

cumulative estimation control means for recording said audit result obtained by said
log analyze means to be associated with an identifier of each electronic commerce
5 transaction entity; and

audit information service means, when there is a provision request for audit
information that has specified said identifier of electronic commerce transaction entity, for
extracting said audit result recorded to be associated with the corresponding identifier from
said cumulative estimation control means so as to provide the extracted audit result as audit
10 information.

7. The electronic commerce transaction audit system according to claim 4,
further comprising:

cumulative estimation control means for recording said audit result obtained by said
log analyze means to be associated with an identifier of each electronic commerce
5 transaction entity; and

audit information service means, when there is a provision request for audit
information that has specified said identifier of electronic commerce transaction entity, for
extracting said audit result recorded to be associated with the corresponding identifier from
said cumulative estimation control means so as to provide the extracted audit result as audit
10 information.

8. The electronic commerce transaction audit system according to claim 5,
further comprising:

cumulative estimation control means for recording said audit result obtained by said
 log analyze means to be associated with an identifier of each electronic commerce
 5 transaction entity; and

audit information service means, when there is a provision request for audit
 information that has specified said identifier of electronic commerce transaction entity, for
 extracting said audit result recorded to be associated with the corresponding identifier from
 said cumulative estimation control means so as to provide the extracted audit result as audit
 10 information..

9. An electronic notarizing apparatus comprising:

transaction log storage means for uniformly stamping time on all exchange messages
 between electronic commerce transaction entities to record and store said stamped time;
 notarize means for requesting other electronic notarizing apparatus to notarize all
 5 exchange messages recorded and stored by said transaction log storage means and for
 receiving a response to the corresponding request from said other electronic notarizing
 apparatus; and

transaction certification storage means for storing the response received by said
 notarize means.

10. An electronic commerce transaction audit apparatus comprising:

log analyze means for comparing an event occurred in the entire network area and
 with an event grasped in advance and to be generated in the entire network area, whereby
 auditing conformity with specifications on the electronic commerce transaction between
 5 the respective electronic commerce transaction entities.

11. An electronic commerce transaction audit apparatus comprising:

log analyze means for obtaining time that elapses before a response message is
 returned after receiving a request message in connection with an event occurred in the
 entire network area, whereby auditing a respond reaction ability of each electronic
 5 commerce transaction entity.

12. An electronic commerce transaction audit apparatus comprising:

log analyze means for calculating a frequency of occurrence of an abnormal response in connection with an event occurred in the entire network area, whereby auditing an abnormal response processing ratio of each electronic commerce transaction entity.

13. An electronic commerce transaction auditing method wherein a plurality of electronic notarize means, which uniformly stamp time on all exchange messages between electronic commerce transaction entities to record and store said stamped time, vie with each other to take a mutual notarization of said all exchange messages recorded and stored
5 via a network.

14. The electronic commerce transaction auditing method according to claim 13, wherein estimation means, which is provided independently of said plurality of electronic notarize means, automatically collects all exchange messages recorded and stored by said plurality of electronic notarize means and verifies reliability of said all collected exchange
5 messages, whereby determining an event occurred in the entire network area.

15. The electronic commerce transaction auditing method according to claim 14, wherein said estimation means further compares the event occurred in the entire network area and verified and determined with an event grasped in advance and to be generated in the entire network area, whereby auditing conformity with specifications on the electronic
5 commerce transaction between the respective electronic commerce transaction entities.

16. The electronic commerce transaction auditing method according to claim 14, wherein said estimation means further obtains time that elapses before a response message is returned after receiving a request message in connection with the event occurred in the entire network area and verified and determined, whereby auditing a response reaction
5 ability of each electronic commerce transaction entity.

17. The electronic commerce transaction auditing method according to claim 14, wherein said estimation means further calculates a frequency of occurrence of an abnormal response in connection with the event occurred in the entire network area and verified and

determined, whereby auditing an abnormal response processing ratio of each electronic
 5 commerce transaction entity.

18. The electronic commerce transaction auditing method according to claim 15,
 wherein said estimation means further records said audit result to be associated with an
 identifier of each electronic commerce transaction entity, and extracts the audit result
 recorded to be associated with the corresponding identifier to provide the extracted audit
 5 result as audit information when there is a provision request for audit information that has
 specified said identifier of electronic commerce transaction entity.

19. The electronic commerce transaction auditing method according to claim 16,
 wherein said estimation means further records said audit result to be associated with an
 identifier of each electronic commerce transaction entity, and extracts the audit result
 recorded to be associated with the corresponding identifier to provide the extracted audit
 5 result as audit information when there is a provision request for audit information that has
 specified said identifier of electronic commerce transaction entity.

20. The electronic commerce transaction auditing method according to claim 17,
 wherein said estimation means further records said audit result to be associated with an
 identifier of each electronic commerce transaction entity, and extracts the audit result
 recorded to be associated with the corresponding identifier to provide the extracted audit
 5 result as audit information when there is a provision request for audit information that has
 specified said identifier of electronic commerce transaction entity.

21. An electronic notarizing method comprising:
 the first step of uniformly stamping time on all exchange messages between
 electronic commerce transaction entities to record and store said stamped time;
 the second step of requesting other electronic notarizing apparatus to notarize all
 5 exchange messages recorded and stored in said first step;
 the third step of receiving a response to the corresponding request in said second step;
 and

the fourth step of storing the response received in said third step.

22. An electronic commerce transaction auditing method wherein an event occurred in the entire network area is compared with an event grasped in advance and to be generated in the entire network area, whereby auditing conformity with specifications on the electronic commerce transaction between the respective electronic commerce
5 transaction entities.

23. An electronic commerce transaction auditing method wherein time that elapses before a response message is returned after receiving a request message is obtained in connection with an event occurred in the entire network area, whereby auditing a response reaction ability of each electronic commerce transaction entity.

24. An electronic commerce transaction auditing method wherein a frequency of occurrence of an abnormal response is calculated in connection with an event occurred in the entire network area, whereby auditing an abnormal response processing ratio of each electronic commerce transaction entity.

25. A storage medium having a computer-program recorded thereon, said storage medium causing a computer to execute:

the first processing of uniformly stamping time on all exchange messages between electronic commerce transaction entities to record and store said stamped time;

5 the second processing of requesting other electronic notarizing apparatus to notarize all exchange messages recorded and stored in said first step;

the third processing of receiving a response to the corresponding request in said second step; and

the fourth processing of storing the response received in said third step.

26. A storage medium having a computer-program recorded thereon, said storage medium causing a computer to execute processing of comparing an event occurred in the entire network area with an event grasped in advance and to be generated in the entire network area, whereby auditing conformity with specifications on the electronic commerce

5 transaction between the respective electronic commerce transaction entities.

27. A storage medium having a computer-program recorded thereon, said storage medium causing a computer to execute processing of obtaining time that elapses before a response message is returned after receiving a request message in connection with an event occurred in the entire network area, whereby auditing a response reaction ability of each
5 electronic commerce transaction entity.

28. A storage medium having a computer-program recorded thereon, said storage medium causing a computer to execute processing of calculating a frequency of occurrence of an abnormal response in connection with an event occurred in the entire network area, whereby auditing an abnormal response processing ratio of each electronic commerce
5 transaction entity.

29. A storage medium group wherein said program described in claim 25 is divided into a plurality of portions and said plurality of portions is recorded on each of a plurality of storage mediums.

30. A storage medium group wherein said program described in claim 26 is divided into a plurality of portions and said plurality of portions is recorded on each of a plurality of storage mediums.

31. A storage medium group wherein said program described in claim 27 is divided into a plurality of portions and said plurality of portions is recorded on each of a plurality of storage mediums.

32. A storage medium group wherein said program described in claim 28 is divided into a plurality of portions and said plurality of portions is recorded on each of a plurality of storage mediums.